Seized Ship Part of Worldwide Intelligence Net

By EVERT CLARK Special to The New York Times

WASHINGTON, Jan. 23-The intelligence ship Pueblo was one unit in a vast network of electronic eavesdropping de-vices that the United States operates on land and sea, in identified the Pueblo as an enthe air and in space.

trouble spots.

take down on magnetic tape pertinent—a Navy intelligence-the electronic signatures of So-collection auxiliary ship.

& Space Technology noted this electronic devices. month, in a study of electronic As Old As

Vessels Seek Electronic Data radar has a different purpose, on Missile-Guidance Radar Designed by Russians

le air and in space. Vironmental-research ship. In a emy radio and find out what Engineers who have seen Detechnically complex world military messages it carries fense Department photographs where radio, radar and satellite of the ship have no doubt that communications play a vital it was trying to pinpoint the role in warfare, "environment" sites of key radio and radar often mean the electronic surstations in North Korea, one roundings, rather than more of the world's most likely tangible phenomena.

The vessel was also described There is some feeling here as a modified auxiliary light-that the Pueblo was trying to cargo ship, and—perhaps more

other electronic countermeasures to cripple a radar in the event of combat.

Electronic warfare, according to the experts, has emerged in Vietnam as a necessity for victory in modern war.

Pilots Rely on Devices

The magazine Aviation Week & Space Technology noted this last summer with the loss of many lives.

But the liberty and the Pueblo are typical of ships, submarines, planes, unmanned the united States have each used a "feinting" technique to make used to listen and to learn everything possible about the energy emitted by the enemy's frequencies. American aircraft have penetrated close to Si-

or payload."

One report today said that is being used.

the Defense Department had Eavesdropping on enemy

since radar is used not to carry messages but to find a hostile ship, plane, missile or satellite and sometimes to direct a counterweapon toward it.

To listen furtively to an en-

To ferret out new radar frequencies takes less time, but it is a more complex task and

often very risky.

Each side must know the location and radar signature of the enemy's radar to put it out of commission with bombs or viet-built antiaircraft and missile-gu dance radars.

Such signatures are needed so that American engineers can design jamming devices and other electronic countermeas-last summer with the loss of war II and are now considered with some content of the content o

The magazine Aviation Week electronic devices.

Space Technology noted this electronic devices.

As Old As Radio

Eavesdropping on an enemy and Soviet planes have pushed pilots now wish to fly without radio messages is an old as readio itself. The aim is usually ures) equipment, although it to find out the content of the sometimes must be carried at transmission, rather than to desorptions must be carried at transmission, rather than to desorptions must be carried at transmission, rather than to desorptions or payload."

In the defense, for example, and Soviet planes have pushed near the Distant Early Warning line in Canada. This may force the other side to turn on the sometimes must be carried at transmission, rather than to desorption the other side to turn on the termine the frequency or to learn what kind of equipment "peacetime" frequency, with a more efficient frequency used more efficient frequency used only in wartime.